



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 6852**
John A. ROBBINS : **Docket No. 2001_1859**
Serial No. 10/017,383 : **Group Art Unit 1761**
Filed December 18, 2001 :

2/21/03
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TC 1700

**A PROCESS AND APPARATUS FOR REDUCTION
OF MICROORGANISMS IN A CONDUCTIVE
MEDIUM USING LOW VOLTAGE PULSED
ELECTRICAL ENERGY**

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents,
Washington, DC 20231

Sir:

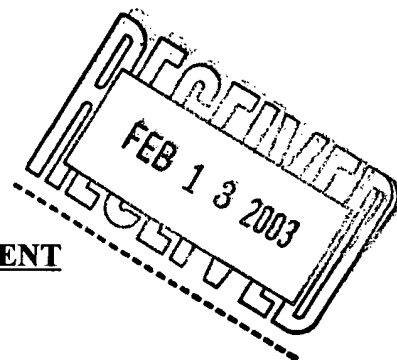
Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of ☒ the references listed on attached form PTO-1449 and/or ☐ the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. .

1a. ☒ This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, **or**

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.



- 1b. ☐ This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) ☐ the certification of paragraph 2 below is provided, **or**
(2) ☐ the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

- 1c. ☐ This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

2. It is hereby certified

- a. ☐ that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or
b. ☐ that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.

3. ☐ Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

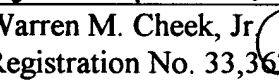
4. For each non-English language reference listed on the attached form PTO-1449, reference is made to:

- a. ☐ a full or partial English language translation submitted herewith,
 - b. ☐ a foreign patent office search report (in the English language) submitted herewith,
 - c. ☐ the concise explanation contained in the specification of the present application at page,
 - d. ☐ the concise explanation set forth in the attached English language abstract,
 - e. ☐ the concise explanation set forth below or on a separate sheet attached to the reference:
5. ☐ A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

John A. ROBBINS

By


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February 5, 2003

FORM PTO 1449 (modified)

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICELIST OF REFERENCES CITED BY APPLICANT(S)
(Use several sheets if necessary)

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ATTY DOCKET NO.
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10/017,383APPLICANT
John A. ROBBINSFILING DATE
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U.S. PATENT DOCUMENTS

*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA	4,917,785	4/1990	Juvan	204	164	
	AB	4,957,606	9/1990	Juvan	204	164	
	AC	5,026,484	6/1991	Juvan	210	717	
	AD	5,037,524	8/1991	Juvan	204	307	
	AE	5,464,513	11/1995	Goriachev et al.	204	164	
	AF	5,514,391	5/1996	Bushnell et al.	426	237	
	AG	5,630,915	5/1997	Greene et al.	204	164	
	AH	5,766,447	6/1998	Creighton	205	742	
	AI	4,315,514	2/1982	Drewes et al.	128	653	
	AJ	4,457,221	7/1984	Geren	99	451	
	AK	4,695,472	9/1987	Dunn et al.	426	237	
	AL	4,838,154	6/1989	Dunn et al.	99	451	
	AM	4,871,559	10/1989	Dunn et al.	426	248	

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FOREIGN PATENT DOCUMENTS

		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AN						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	AO	FDA Submission by John Robbins Published April 29, 1999, including letter from J. Robbins to FDA dated September 30, 1998, Appendices I-V and Appendix A.
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EXAMINER

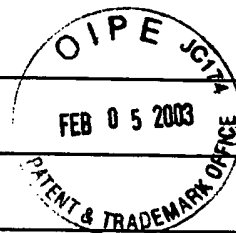
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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	BA	4,994,160	2/1991	Doevenspeck	204	165	
	BB	5,034,235	7/1991	Dunn et al.	426	238	
	BC	5,048,404	9/1991	Bushnell et al.	99	451	
	BD	5,091,152	2/1992	Thomas, Sr.	422	23	
	BE	5,235,905	8/1993	Bushnell et al.	99	451	
	BF	5,324,398	6/1994	Erickson et al.	204	149	
	BG	5,364,645	11/1994	Lagunas-Solar et al.	426	248	
	BH	5,368,724	11/1994	Ayers et al.	210	110	
	BI	5,393,541	2/1995	Bushnell et al.	426	237	
	BJ	5,397,961	3/1995	Ayers et al.	315	111.21	
	BK	5,447,733	9/1995	Bushnell et al.	426	237	
	BL	5,549,041	8/1996	Zhang et al.	99	451	
	BM	5,768,853	6/1998	Bushnell et al.	53	167	
	BN	5,776,529	7/1998	Qin et al.	426	231	

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	BP	Pulsed Power Odor Control of a Power Plant Intake Dredging Project, Vero Beach Municipal Power Plant, December 1997.
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EXAMINER

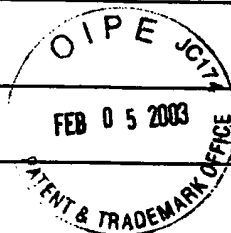
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	CA	5,690,978	11/1997	Yin et al.	426	237	
	CB	5,786,598	7/1998	Clark et al.	250	455	
	CC	5,900,211	5/1999	Dunn et al.	422	24	
	CD	5,925,885	7/1999	Clark et al.	250	492.1	
	CE	6,010,613	1/2000	Walters et al.	205	701	
	CF	6,010,727	1/2000	Rosenthal	426	240	
	CG	6,013,918	1/2000	Bushnell et al.	250	454.11	
	CH	6,019,031	2/2000	Qin et al.	99	451	
	CI	6,027,754	2/2000	Bushnell et al.	426	238	
	CJ	6,078,490	6/2000	Walters	361	88	
	CK	6,086,932	7/2000	Gupta	426	237	
	CL	6,093,432	7/2000	Mittal et al.	426	237	
	CM	6,110,423	8/2000	Bushnell et al.	422	23	
	CN	6,117,660	9/2000	Walters et al.	435	173.6	
	CO	6,120,818	9/2000	Long	426	238	
	CP	6,150,663	11/2000	Rosenthal	250	435	
	CQ	6,168,814	1/2001	Long	426	238	

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OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	CS	Food Engineering, "Pulse power disinfects fresh juices, extends shelf life", October, 1998, pp. 47-49.
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*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	DA	6,214,297	4/2001	Zhang et al.	422	186	
	DB	6,178,880	1/2001	Mastwijk et al.	99	451	
	DC	6,228,266	5/2001	Shim	210	614	
	DD	6,228,332	5/2001	Dunn et al.	422	186.3	
	DE	5,801,489	9/1998	Chism, Jr. et al.	315	111.21	
	DF	5,837,303	11/1998	Hayden	426	237	

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		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	DG						

OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)

	DH	Appendix I to J. Robbins FDA submission, Bai-Lin Qin et al., "Inactivating Microorganisms Using a Pulsed Electric Field Continuous Treatment System", IEEE Transactions on Industry Applications, Vol. 34, No. 1, January/February 1998.
	DI	Appendix II to J. Robbins FDA submission, Karl H. Schoenbach et al., "The Effect of Pulsed Electrical Fields on Biological Cells", paper presented at EPRI/Army PEF Workshop II, Chicago, IL on October 10-11, 1997.
	DJ	Appendix III to J. Robbins FDA submission, K. H. Schoenbach et al., "Effect of Pulsed Electric Fields on Micro-organisms: Experiments and Applications, paper presented at EPRI/Army PEF Workshop II, Chicago, IL on October 10-11, 1997.
	DK	Appendix IV to J. Robbins FDA submission, K. H. Schoenbach et al., "The Effect of Pulsed Electric Fields on Biological Cells: Experiments and Applications", IEEE Transactions on Plasma Science, Vol. 25, No. 2, April 1997.
	DL	Appendix I to J. Robbins FDA submission, Minutes of EPRI/Army PEF Workshop II, Chicago, IL on October 10-11, 1987.
	DM	Appendix A to J. Robbins FDA submission, 28 Day Shelf Life Study on Orange Juice Treated Using Electric Pulse Process, Metals Analysis for Primary and Secondary Standards on Orange Juice Treated Using Electric Pulse Process.

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